Listing of Claims

1-60. (Cancelled).

61. (New) A population of cells enriched for STRO-1^{bright} cells, wherein such STRO-1^{bright} cells are mesenchymal precursor cells which comprise mesenchymal precursor cells capable of giving rise to colony forming unit-fibroblasts (CFU-F).

62. (New) An enriched population of cells as in claim 61, wherein the mesenchymal precursor cells carry at least one additional marker selected from the group of surface markers consisting of THY-1, VCAM-1, STRO-2, and CD146.

63. (New) An enriched population of cells as in claim 62, wherein the mesenchymal precursor cells carry the markers STRO-1 and VCAM-1.

64. (New) An enriched population of cells as in claim 61, wherein a proportion of the cells are capable of differentiation into at least two committed cell types selected from the group consisting of adipose, areolar, osseous, cartilaginous, elastic, and fibrous connective tissue.

65. (New) An enriched population of cells as in claim 61, wherein the enriched population is suitable for seeding onto a vehicle for implantation to assist in bone growth.

66. (New) An enriched population of cells as in claim 61, wherein the cells in the enriched population comprise an

COPY

exogenous nucleic acid that expresses a therapeutic agent transformed into them such that the population of cells may be introduced into the body of a patient to release the therapeutic agent.

67. (New) An enriched population of cells as in claim 61, wherein the enriched population is used to augment bone marrow transplantation.

68. (New) A composition comprising the enriched population of cells of claim 61.

69. (New) A composition as in claim 68, wherein the composition is preadsorbed onto a ceramic vehicle that is precoated with fibronectin and is suitable for implantation to augment bone marrow transplantation.

70. (New) A composition as in claim 68, wherein the composition is suitable for use in augmenting bone marrow transplantation.

71. (New) A composition as in claim 68, wherein the composition also comprises haemopoietic cells.

72. (New) A composition as in claim 68, wherein the population of cells comprises an exogenous nucleic acid that expresses a therapeutic agent transformed into them such that the composition may be introduced into the body of a patient to release the therapeutic agent.

73. (New) An enriched population of cells as in claim 61, wherein the STRO-1^{bright} cells are negative for at least one

COPY

marker selected from the group consisting of CBFA-1, collagen type II, PPARγ2, and glycophorin A.